### PATENT COOPERATION TREATY

## **PCT**

## INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

(Chapter II of the Patent Cooperation Treaty)

(PCT Article 36 and Rule 70)

Applicant's or agent's file reference SP1136 EG/sc	FOR FURTHER A	CTION	See Form PCT/IPEA/416				
International application No. PCT/EP2004/007551	International filing date 09.07.2004	(day/month/year)	Priority date (day/mont) 23.07.2003	h/year)			
International Patent Classification (IPC) or national classification and IPC A43C15/16, B60C11/16, A43B13/26							
Applicant BESTGRIP S.R.L. et al.							
This report is the international prel Authority under Article 35 and tran	iminary examination re smitted to the applican	port, established by this t according to Article 36.	International Prelimina	ary Examining			
2. This REPORT consists of a total o	f 6 sheets, including th	nis cover sheet.					
3. This report is also accompanied by	y ANNEXES, comprisin	ıg:					
a. 🛛 sent to the applicant and to	the International Bure	au) a total of 1 sheets,	as follows:				
sheets of the description and/or sheets containin Administrative Instruction	ig rectifications authoriz	ngs which have been am zed by this Authority (see	ended and are the base Rule 70.16 and Secti	sis of this report ion 607 of the			
☐ sheets which supersed beyond the disclosure i Supplemental Box.	e earlier sheets, but whin the international app	nich this Authority consic lication as filed, as indica	lers contain an amend ated in item 4 of Box N	ment that goes o. I and the			
b. ☐ <i>(sent to the International Bu</i> sequence listing and/or tabl Box Relating to Sequence I	les related thereto, in co	omputer readable form c	nly, as indicated in the	) , containing a Supplemental			
4. This report contains indications rel	ating to the following ite	ems:					
☑ Box No. I Basis of the opin	ion						
☐ Box No. II Priority							
⊠ Box No. III Non-establishme	ent of opinion with regar	rd to novelty, inventive s	tep and industrial appli	cability			
Box No. IV Lack of unity of in							
☐ Box No. V Reasoned staten applicability; citat	nent under Article 35(2 tions and explanations	) with regard to novelty, supporting such stateme	inventive step or indus ent	trial			
☐ Box No. VI Certain documer	nts cited						
	n the international appli						
☐ Box No. VIII Certain observati	ions on the internationa	al application					
Date of submission of the demand		Date of completion of this	report	-			
23.12.2004	24.03.2005		*				
Name and mailing address of the international preliminary examining authority:	Authorized Officer		givehas Palantone.				
European Patent Office D-80298 Munich Tel. +49 89 2399 - 0 Tx: 52365 Fax: +49 89 2399 - 4465	6 epmu d	Vesin, S Telephone No. +49 89 238	99-7489	Cases a selfo			

## INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

**10/565**441 International application No. PCT/EP2004/007551

IAP20 Residiania 20 JAN 2006

	Box No. I Basis of the report		
1.	With regard to the language, the filed, unless otherwise indicated	s report is based on the international application in the language in which it under this item.	was
	which is the language of a t  international search (und publication of the interna	slations from the original language into the following language, ranslation furnished for the purposes of: ler Rules 12.3 and 23.1(b)) tional application (under Rule 12.4) examination (under Rules 55.2 and/or 55.3)	
2.	With regard to the elements* of have been furnished to the receive report as "originally filed" and an	the international application, this report is based on (replacement sheets which in the control of the control	hich 's
	Description, Pages		
	1-10	as originally filed	
	Claims, Numbers		
	4 (part), 5-15	as originally filed	
	1-3, 4 (part)	received on 23.12.2004 with letter of 20.12.2004	
	Drawings, Sheets		
	1/5-5/5	as originally filed	
	☐ a sequence listing and/or an	y related table(s) - see Supplemental Box Relating to Sequence Listing	
3.	☐ The amendments have resured the description, pages ☐ the claims, Nos. ☐ the drawings, sheets/figs ☐ the sequence listing (spee ☐ any table(s) related to se	cify):	
1.	☐ This report has been established not been made, since they he Supplemental Box (Rule 70.2(c)) ☐ the description, pages ☐ the claims, Nos. ☐ the drawings, sheets/figs ☐ the sequence listing (speed any table(s) related to see	cify):	v e
	* If item 4 applies, so	me or all of these sheets may be marked "superseded "	

# INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

International application No. PCT/EP2004/007551

		x No. III Non-establishment o blicability	of op	pinion with regard to novelty, inventive step and industrial
1.	The obv	he questions whether the claimed invention appears to be novel, to involve an inventive step (to be non- bvious), or to be industrially applicable have not been examined in respect of:		
	$\boxtimes$	the entire international applicat	ion,	
		claims Nos.		
		because:		
		the said international application not require an international pre-	n, or limin	the said claims Nos. relate to the following subject matter which does ary examination (specify):
		the description, claims or drawithat no meaningful opinion could	ngs ld be	(indicate particular elements below) or said claims Nos. are so unclear formed (specify):
		the claims, or said claims Nos. could be formed.	are s	so inadequately supported by the description that no meaningful opinion
	$\boxtimes$	no international search report h	as b	een established for the said claims Nos. 1-15
		the nucleotide and/or amino acid sequence listing does not comply with the standard provided for in Annex C of the Administrative Instructions in that:		
		the written form		has not been furnished
				does not comply with the standard
		the computer readable form		has not been furnished
				does not comply with the standard
		the tables related to the nucleon not comply with the technical re	tide a equire	and/or amino acid sequence listing, if in computer readable form only, do ements provided for in Annex C-bis of the Administrative Instructions.
		See separate sheet for further of	detai	ls

# INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

International application No. PCT/EP2004/007551

	Box	x No. IV Lack of unity of invention
1.	$\boxtimes$	In response to the invitation to restrict or pay additional fees, the applicant has:  ☐ restricted the claims.  ☐ paid additional fees.  ☐ paid additional fees under protest.  ☑ neither restricted nor paid additional fees.
2.		This Authority found that the requirement of unity of invention is not complied with and chose, according to Rule 68.1, not to invite the applicant to restrict or pay additional fees.
3.	This	s Authority considers that the requirement of unity of invention in accordance with Rules 13.1, 13.2 and 13.3
		complied with.
	$\boxtimes$	not complied with for the following reasons:
		see separate sheet
4.	Cor	sequently, this report has been established in respect of the following parts of the international application:
		all parts.
		the parts relating to claims Nos



### INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY (SEPARATE SHEET)

International application No.

PCT/EP2004/007551

IAP20 RESULTETTE 20 JAN 2006

#### Re Item I

In the incomplete set of claims filed on 20.12.2004 claims 1, 2 and 3 were merged but the other claims 4-17 have not been renumbered. The numbers referred to in the following lines correspond to the claims as if they had been correctly renumbered. Therefore the 15 claims presently on file are numbered 1 to 15 whereby present claims 2 and following correspond to original claims 4 and following.

#### Re Items III and IV

Claim 1 as presently on file is the result of the merging of original claims 1,2 and 3. Since original claims 2 and 3 were not searched in the PCT I phase, no examination of present claim 1 or its dependent claims 2 to 8 will be performed.

Claims 9 to 14 relate to a tool for mounting studs. Said claims have been objected previously in the written opinion during the PCT chapter I phase, because they define a second invention which is not unitary with the first invention claimed in original claims 1, 8-10. Since said tool has not been searched during the PCT chapter I phase, no examination will be performed for present claims 9 to 14.

In addition, claim 15 (original claim 17) does not fulfil the requirements of the PCT with respect to Rule 6.2(a) PCT, since claims shall not rely, in respect of the technical features of the invention, on references to the description or drawings (See Guidelines 5.10).

However, it appears that documents **US 5 897 177 A (D3)** and **US 3 124 191 A (D5)** anticipate, additionally to the subject-matter of original claim 1, also the non searched features of original claims 2 and 3. Therefore both documents anticipate fully the subject-matter of present claim 1. Consequently the application does not meet the criteria of Article 33(1) PCT, because the subject-matter of claim 1 is not novel in the sense of Article 33(2) PCT, see **D3** (claims 1,6; col.3, lines 6-24 and figures 4-6) and **D5** (figure 1, 2 and 7; col.2, lines 3-29).

Note that since the edges of the studs shown in **D3** and **D5** enable the stud to tap in the rubber support, they have implicitly a "cutting" function so that the last features of claim 1 are also shown by those documents.

The subject-matter of present claims 6-8 (corresponding to searched original claims

### INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY (SEPARATE SHEET)

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8-10), dependent on claim 1, is also known from either D3 or D5 (see figures).

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EPO - DG 1

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### **CLAIMS**

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- 1. A self-tapping stud for rubber supports of shoes, tyres and the like, comprising a body presenting a threaded portion fixable into said rubber support and a head which projects from said support when said stud has been mounted, characterised in that said threaded portion presents a thread provided with a free helical edge which extends along a substantially cylindrical surface;
- 2. A self-tapping stud for rubber supports of shoes, tyres and the like, comprising a body presenting a threaded portion fixable into said rubber support and a head which projects from said support when said stud has been mounted, characterised in that said threaded portion presents a substantially conical or frusto-conical core; AND
- 3. A self-tapping stud for rubber supports of shees, tyres and the like, comprising a body presenting a threaded portion fixable into said rubber support and a head which projects from said support when said stud has been mounted, characterised in that said threaded portion presents a thread provided at its free start with a cutting edge, said cutting edge being orientated with the same inclination as said thread.
- 4. A self-tapping stud as claimed in one or more of the preceding claims, characterised in that a first thread profile facing the convergent end of the core is substantially perpendicular to an axis of said core.
- 5. A self-tapping stud as claimed in one or more of the preceding claims, characterised in that a second thread profile facing the body of said core is substantially inclined to an axis of said core.
- 6. A self-tapping stud as claimed in one or more of the preceding claims, characterised in that said second profile is inclined at an obtuse

